

Appln No. 10/616,639

Amdt date February 28, 2005

Reply to Office action of December 1, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Canceled).

2. (Previously Presented) A deflection yoke for a cathode ray tube including a ferrite core having a funnel-shaped body, an inner surface, and an outer surface, the inner surface of a cross section of the ferrite core comprising:

a first section having, along a length thereon, a shape of a circle with a predetermined, unvarying radius;

a second section having, along a length thereon, a shape of a circle with a varying radius, the second section being connected to the first section; and

a third section having a non-circular shape and being connected to the second section, wherein the third section of the inner surface has a shape of interconnected segments of three circles, each of a different radius.

3. (Previously Presented) The deflection yoke of claim 2, wherein each said different radius of the third section increases from one end of the third section connected to the second section to an opposite end.

4. (Currently Amended) A deflection yoke for a cathode ray tube including a ferrite core having a funnel-shaped body, an

Appln No. 10/616,639

Amdt date February 28, 2005

Reply to Office action of December 1, 2004

inner surface, and an outer surface, the inner surface of a cross section of the ferrite core comprising:

a first section having, along a length thereon, a shape of a circle with a predetermined, unvarying radius;

a second section having, along a length thereon, a shape of a circle with a varying radius, the second section being connected to the first section; and

a third section having a non-circular shape and being connected to the second section, wherein the third section of the inner surface has a shape of a segment of a circle and two pairs of substantially straight lines including a pair of vertical lines and a pair of horizontal lines.

5. (Previously Presented) A deflection yoke for a cathode ray tube including a ferrite core having a funnel-shaped body , an inner surface, and an outer surface, the inner surface of a cross section of the ferrite core comprising:

a first section having, along a length thereon, a shape of a circle with a predetermined, unvarying radius;

a second section having, along a length thereon, a shape of a circle with a varying radius, the second section being connected to the first section; and

a third section having a non-circular shape and being connected to the second section, wherein the third section has a shape of interconnected segments of three circles and two substantially straight lines.

Appln No. 10/616,639

Amdt date February 28, 2005

Reply to Office action of December 1, 2004

6. (Currently Amended) ~~The~~ A deflection yoke of claim 1 for
a cathode ray tube including a ferrite core having a funnel-
shaped body , an inner surface, and an outer surface, the inner
surface of a cross section of the ferrite core comprising:

a first section having, along a length thereon, a shape of
a circle with a predetermined, unvarying radius;

a second section having, along a length thereon, a shape of
a circle with a varying radius, the second section being
connected to the first section; and

a third section having a non-circular shape and being
connected to the second section, wherein the first and second
sections have surfaces rougher than a surface of the third
section.

7. (Currently Amended) The deflection yoke of claim ~~1~~ 2,
further comprising a horizontal deflection coil, a vertical
deflection coil, and an insulating member interposed between the
horizontal and the vertical deflection coils.

8. (Previously Presented) The deflection yoke of claim 7,
wherein the horizontal and the vertical deflection coils have a
shape similar to a shape of the insulating member.

9. (Previously Presented) The deflection yoke of claim 7,
wherein the horizontal and the vertical deflection coils include
a pair of coil members.

10. (Canceled).

Appln No. 10/616,639

Amdt date February 28, 2005

Reply to Office action of December 1, 2004

11. (Currently Amended) A deflection yoke for a cathode ray tube including a ferrite core having a funnel-shaped body, an inner surface and an outer surface, the inner surface of a cross section of the ferrite core comprising:

a first section formed as having, along a length thereon, a shape of a circle with a varying radius; and

a second section having a non-circular shape and being connected to the first section, wherein the second section of the inner surface has a shape of interconnected segments three circles, each of a different radius.

12. (Currently Amended) A deflection yoke for a cathode ray tube including a ferrite core having a funnel-shaped body, an inner surface and an outer surface, the inner surface of a cross section of the ferrite core comprising:

a first section formed as having, along a length thereon, a shape of a circle with a varying radius; and

a second section having a non-circular shape and being connected to the first section, wherein the second section of the inner surface has a shape of a segment of a circle and two pairs of substantially straight lines including a pair of vertical lines and a pair of horizontal lines.

13. (Currently Amended) A deflection yoke for a cathode ray tube including a ferrite core having a funnel-shaped body, an inner surface and an outer surface, the inner surface of a cross section of the ferrite core comprising:

Appln No. 10/616,639

Amdt date February 28, 2005

Reply to Office action of December 1, 2004

a first section formed as having, along a length thereon, a shape of a circle with a varying radius; and

a second section having a non-circular shape and being connected to the first section, wherein the second section of the inner surface has a shape of interconnected segments of three circles and two substantially straight lines.

14-18 (Canceled)

19. (Currently Amended) A cathode ray comprising:

a substantially rectangular panel;

a funnel connected to the panel and having a cone shape;

a neck connected to the funnel;

a deflection yoke mounted to an outer circumference of the funnel; and

a ferrite core mounted to a side of the deflection yoke, wherein the ferrite core includes a body having an inner surface and an outer surface, the inner surface of a cross section of the ferrite core comprising:

a first section having, along a length thereon, a shape of a circle with a predetermined, unvarying radius;

a second section having, along a length thereon, the shape of a circle with a varying radius, the second section being connected to the first section; and

a third section having a non-circular shape and being connected to the second section, wherein the third section of the inner surface has a shape of interconnected segments of three circles, each of a different radius.

Appln No. 10/616,639

Amdt date February 28, 2005

Reply to Office action of December 1, 2004

20. (Currently Amended) A cathode ray comprising:
a substantially rectangular panel;
a funnel connected to the panel and having a cone shape;
a neck connected to the funnel;
a deflection yoke mounted to an outer circumference of the funnel; and

a ferrite core mounted to a side of the deflection yoke, wherein the ferrite core includes a body having an inner surface and an outer surface, the inner surface of a cross section of the ferrite core comprising:

a first section having, along a length thereon, a shape of a circle with a predetermined, unvarying radius;

a second section having, along a length thereon, the shape of a circle with a varying radius, the second section being connected to the first section; and

a third section having a non-circular shape and being connected to the second section, wherein the third section of the inner surface has a shape of a segment of a circle and two pairs of substantially straight lines including a pair of vertical lines and a pair of horizontal lines.